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The Treatment of Companies Under Cash Flow Taxes

Some Administrative, Transitional, and International Issues

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Cash flow taxes eliminate many of the problems of the corporate income tax, but they have significant administrative, transitional, and international problems, especially for developing countries.

The author begins his discussion of the cash flow tax by outlining the major administrative and compliance issues of a cash flow tax. There are problems with the tax because of the numerous possibilities for gaming the system (particularly if financial flows are left out of the tax base), the appropriate treatment of employee benefits and business entertainment, and the treatment of loss companies. In addition, the cash flow tax has the same problem as the corporate income tax in dealing with companies that do not use aboveboard accounting procedures.

The paper goes on to discuss the problems involved in the transition from a corporate income tax to a cash flow tax. First, carryover problems arise because income deferred under the income tax may never be taxed under the cash flow tax and income previously taxed by income tax may be taxed a second time under the cash flow tax. Second, changes in asset prices arise because changes in the tax law affect expected after-tax cash flows, causing either windfall gains or losses. There are ways around

these problems but they cause further ones. Sunley outlines these secondary problems and possible solutions to them but concludes that there is no easy way to orchestrate a totally smooth transition.

The international aspects of imposing a cash flow tax are most troublesome. After a summary of the major international income tax rules, Sunley discusses how the cash flow tax treats inbound investment, outbound investment, and export and imports. It is likely that a cash flow tax imposed by a developing country would not be creditable against the U.S. income tax. In addition, it would be difficult to provide a border tax adjustment for a cash flow tax.

The paper concludes by proposing one way to fix up the income tax. It suggests that the tax base be defined in terms of financial income with certain specific adjustments such as for depreciation and extraordinary items. The proposal is in some depth, including a simplified system of tax depreciation.

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A "cash flow tax", as this term is commonly used, is a broad-based consumption tax imposed on the difference between cash receipts during the period and allowable expenses. Under a cash flow tax, capital assets are expensed, resulting in a zero effective tax rate on the returns to investment.^{1/} Thus, the tax base is consumption, not income. Unlike a sales tax or the credit/invoice-method VAT, a cash flow tax is not imposed on each separate transaction.

Proponents of a cash flow tax generally favor taxing consumption over income because (1) pure consumption taxes do not distort the choice between future and present consumption and (2) consumption taxes avoid the difficult problems of income measurement (e.g. rules for depreciation and

inventories and adjustments for inflation). They also favor a cash flow tax over a transactions-based consumption tax because a cash flow tax can be made more progressive with respect to the level of consumption than a sales tax or a VAT even if these taxes have multiple tax rates with lower rates on necessities and higher rates on luxuries.

This paper is not an evaluation of whether developing countries should impose a cash flow tax or even whether these countries should tax consumption instead of income. This paper focuses on more narrow, but important, issues raised by proposals to impose a cash flow tax on companies; namely the issues of tax administration, transition rules, and the treatment of international capital flows. The Appendix to this paper outlines a practical approach to depreciation and inflation accounting. The Appendix demonstrates that the measurement problems of an income tax can be kept under control.

I. Types of Consumption Flow Taxes

Consumption taxes come in many different stripes. Some would be imposed only at the company level; others only at the individual level; and still others at both the company and individual levels. A corporate cash flow tax is corporate

accompaniment to a full expenditure tax on individuals. To set the stage we begin with a brief description of various proposals for consumption taxes that are not transactions based.

A. Subtraction-Method VAT

Possibly the simplest cash-based consumption tax would be a subtraction-method VAT. This tax would be imposed only on companies. Each company would calculate its value-added by subtracting its purchases from its sales. The tax liability would then be determined by multiplying value-added by the appropriate tax rate.

A defective subtraction method VAT, called a business activities tax, was imposed in Michigan from 1953 to 1967. In the U.S. at the federal level, Senator Roth's business transfer tax is essentially a subtraction-method VAT.^{2/} The recent Canadian tax reform proposals included three options for a comprehensive consumption tax. One option, "the tax on federal goods and services," is a subtraction-method VAT conceived as basically a cash flow tax.^{3/}

Subtraction-method VAT's differ in two major respects from the credit-invoice VAT's that have been enacted by many industrial and developing countries. First, under a subtraction-method tax, the tax is not imposed separately on each transaction. No invoices are required. Second, there is no way to distinguish between taxable and exempt purchases if the tax base is not comprehensive. Thus, if export sales are excluded from the tax base, and a deduction is allowed for all purchases by the exporter, too much VAT would be "rebated" on exports when there are exemptions or exclusions at an earlier stage. A subtraction method VAT could only work with minimal exemptions. In contrast, under the credit invoice method, the tax is imposed on each transaction and the tax collected at each stage of production or distribution is only the tentative tax because purchasers who are not final consumers are able to reduce their tax liability on sales by the amount of tax paid on purchases.

The subtraction-method VAT, like other value-added taxes, is not imposed directly on persons which limits the extent to which this tax can be made progressive.

B. Hall-Rabushka Flat Tax and Bradford's Plan X

Robert Hall and Alvin Rabushka proposed a two-tier variant of a subtraction method VAT.^{4/} Under their flat tax, companies would pay tax on the difference between sales and purchases

from other companies, less compensation paid to employees. Individuals would pay tax on their compensation. The company tax base and the individual tax base when added together would equal value-added, except for any exemptions or personal allowances provided for individuals.

A key feature of the Hall-Rabushka proposal was the flat tax rate for individuals and companies. The Hall-Rabushka proposal could be made more progressive if individuals were taxed at progressive rates. These rates, however, would only apply to labor income. David Bradford's Plan X is a progressive version of the Hall-Rabushka tax.^{5/}

C. Expenditure Tax

A progressive expenditure tax on families and individuals is a third type of consumption tax. One form of this tax was proposed by Professor Nicholas Kaldor^{6/} in 1955 and another form by Professor William D. Andrews^{7/} in 1974. Under the Kaldor proposal, families and individuals would not have to keep track of all their consumption expenditures. Instead, they would first determine their income in much the same way as under the current income tax. They would then subtract net savings to get total consumption for the year. Thus, cash balances at the beginning of the year, money borrowed, and

proceeds from sales of investments during the year would be included in the tax base while end-of-year cash balances, debt repayments, and investments made during the year would be subtracted from the tax base.

The Kaldor expenditure tax (and the Andrews proposal) would only apply to families and individuals. Companies would not be subject to the tax. If the goal is to tax consumption, there is no need to tax companies because companies do not consume, except possibly when they provide in-kind benefits to employees, officers or shareholders.

D. Blueprints

In January 1977, the U.S. Treasury Department released Blueprints for Tax Reform,^{8/} which contained outlines for a comprehensive income tax and a comprehensive consumption tax. The latter applied to families and individuals and was similar to the Kaldor and Andrews proposals. Corporations would not be taxed, but the net receipts of an unincorporated business would be directly attributable to the owner.

The Blueprints consumption tax was a hybrid tax in that individuals had a choice between a cash flow treatment of investments or a tax-prepayment treatment. If an individual chose to invest through qualified accounts, payments to the

qualified account would be deductible and receipts from the account would be taxable. Income earned on funds invested in a qualified account would not be taxable until distributed out of the account. If, instead, the individual chose not to use a qualified account, there would be no deduction for the investment. Thus, the investment would be fully taxed (or tax-prepaid) when made. Income from these investments would be exempt from tax. It can be shown that both the qualified account and the tax-prepayment treatments are equivalent to a zero effective rate of tax on capital income.

E. Meade Commission and the Aaron/Galper Proposals

Both the Meade Commission^{9/} in 1978 and Henry Aaron and Harvey Galper^{10/} in 1985 proposed consumption taxes that would apply to individuals and corporations. The individual portion of the tax would be similar to the cash flow tax outlined in Blueprints. The business component was a cash flow tax with a zero effective tax rate.

The Aaron/Galper cash flow tax on business would permit investments to be expensed. Aaron/Galper propose (1) a tax on the cash flow of the corporation excluding stock sales and dividend payments and other cash distributions to stockholders and (2) a separate withholding tax on dividends, interest, rents and royalties paid to foreigners. This latter tax is

aimed at soaking up any available foreign tax credits in the home country. In the case of unincorporated businesses, the cash flow would be computed in the same way as for incorporated businesses, but it would be attributed directly to the owners.

The Meade Commission outlined several approaches to taxing corporations. The Commission's preferred option would be to tax the net cash flow from real and financial transactions. This is similar to the Aaron/Galper proposal.

The Meade Commission and the Aaron/Galper proposals would impose the cash flow tax on corporations. One may well ask if the goal is to tax consumption, why tax corporations at all in that people not corporations consume.

One reason for taxing corporations may be the appearance problem. If corporations are not taxed in the consumption tax world, individuals may view the tax system as unfair.

Aaron/Galper offer three reasons for not scrapping the corporate tax.^{11/} First, if corporations are not taxed, foreign investors would pay no U.S. tax on their U.S. source income. Second, owners of businesses would be able to use their businesses to avoid personal taxes by having their

corporations buy personal automobiles and other goods for them. Third, if the corporate tax is repealed, current corporate owners of depreciable capital would receive a windfall.

The first of the reasons relates to the international aspects of a cash flow tax and is dealt with in Section V. The second reason is a compliance issue and is a problem for both income and cash flow taxes. This issue is discussed in Section III. The third reason Aaron and Galper offer is a transition issue which is discussed in Section IV.

A final reason that has been put forward for a corporate cash flow tax is that it will raise revenue in present value terms if the cash flows are discounted at the government's borrowing rate. This is true even though the effective tax rate is zero. This present value magic comes from the company's rate of return being above the government's discount rate. I wouldn't want to push this argument too far.

Under a corporate cash flow tax, the government becomes a silent partner. The government's borrowing rate probably is not the appropriate discount rate for discounting the government's cash flows from risky corporate investments, particularly given there is a moral hazard because any private investor with any project would be able to obtain matching funds from the government.

II. Outline of a Corporate Cash Flow Tax

In the case of an expenditure or cash flow tax on individuals, it is fairly clear how the tax base is defined. The total amount of funds at the taxpayer's disposal from all sources (wages, proprietorship income, interest, sales of investments, borrowed funds, cash at the beginning of the year, etc.) would be included in the tax base and a deduction would be allowed for all uses of funds other than for personal consumption (investments, loaned funds, and cash at the end of the year). The tax base is personal consumption.

How would a cash flow tax be applied to corporations? If one included funds from all sources in the tax base and subtracted all funds not expended on consumption, the tax base would be zero because corporations do not consume. Or put another way, for a corporation the sources of funds and the uses of funds are equal and net to zero.

Aaron/Galper and the Meade Commission propose that the tax base for the corporate cash flow tax would include financial flows other than (1) purchases or sales of corporate stock and (2) dividends and other corporate distributions paid or received.^{12/} Under this approach to the cash flow tax, investments would be expensed, borrowings and interest income would be included in the tax base and interest and debt payments would be deductible.

This approach to taxing corporations makes the government a partner with the private investor. If the corporate tax rate is 20 percent, the government puts up 20 percent of the funds when a corporation buys assets with new equity. The government also receives 20 percent of the earnings that are not reinvested and are otherwise available for distribution to shareholders. If the government puts up 20 percent of the funds and receives 20 percent of the return, the effective tax rate, defined as the percentage reduction in the rate of return due to the tax, is zero.

There is an alternative approach to taxing businesses under a cash flow tax. Under this approach the treatment of debt is reversed. Borrowings and interest income would not be included in the tax base and interest and debt repayments would not be deductible. Loans would be given tax prepayment treatment. This treatment leads to the R tax base discussed by the Meade Commission.

This paper will consider the two main versions of corporate cash flow taxes; i.e. with and without financial flows (other than dividends and corporate distributions) being in the tax base. Put another way, the paper will consider both the R + F tax base discussed by Aaron/Galper and Meade as well as the R tax base discussed by the Meade Commission alone.

Though both tax bases will be considered in this paper, including financial flows (R+F) as suggested by Aaron/Galper and Meade appears to be more promising for four reasons. If financial flows are not included in the tax base:

- Companies that are highly leveraged on the effective date of the new law would be disadvantaged because interest would no longer deductible. This transition problem led the Meade Commission to favor the R + F tax base.
- Most financial institutions would have a negative tax base. This would aggravate the problem of loss companies.
- At the individual level, the cash flow tax would be essentially a wage tax. Though a wage tax may be equivalent to a consumption tax, there are likely to be significant perception problems if wages are taxed and capital income exempt. There is also a transitional difference because old people have low wage income but high consumption.
- There will be pressure on the line separating real from financial transactions. For example, how should installment sales or seller-provided financing be treated? Are insurance premiums, loan guarantees, or similar payments financial transactions or real transactions? Are long-term net leases installment sales?

III. Tax Compliance and Administration

A major difficulty with an income tax is that one must first measure income in order to tax it. Though conceptually there is widespread agreement that the income tax base before personal allowances should equal consumption plus change in net worth, there are many practical problems in defining this tax base. Most of these practical problems relate to defining the change in net worth.

A pure consumption tax would eliminate many of these practical problems. For example, it would no longer be necessary to measure depreciation or amortization. Inflation adjustments for depreciation, inventories, capital gains, and debt would not be necessary because all the cash flows would occur in the same year as the tax. Complex basis rules would not be needed because it would not be necessary to compute gain or loss on the sale of assets. Provisions providing for nonrecognition or deferral of gains or losses would disappear.

The compliance and administration argument for a cash flow tax, particularly one that applies to companies, can be overstated. Individuals may not need income and balance sheets, but whether or not there is an income tax, most companies, except the very smallest, will need financial statements for internal management purposes and for reports to shareholders and creditors. Foreign-controlled companies will need to measure income to report to foreign tax authorities.

For companies that have a complete set of financial statements, determining the cash flow tax base would be straightforward. The statement of sources and uses of capital could be adjusted to pull out (1) dividends and other distributions paid or received, (2) sales and purchases of stock and (3) financial cash flows, if these flows are to be excluded. The tax base would equal net cash flow after these adjustments.

It is well known that companies may have three or four sets of books: one for creditors, one for stockholders, one for the tax authorities, and one for management. This is a problem for both an income tax and a cash flow tax. The problem can be minimized by requiring audited financials for larger companies, licensing accountants, pulling licenses of accountants who falsify statements, and imposing criminal penalties for abetting fraud or tax evasion. By taking steps along these lines, the private accounting profession can be made a partner of the tax authorities in insuring that income or cash flow is properly reported. Tax authorities could also require financial institutions to supply the tax authorities with copies of any financial statements submitted with applications for loans in excess of a certain amount.

Small companies will not have either audited or unaudited financials. Some will operate out of a business checkbook. These companies deposit receipts at the end of each day or week and write checks for purchases. The tax base for a cash flow tax can be determined from the bank records if they are complete. It is true that owners can skim cash, but this is a problem for either the income tax or a cash flow tax. If the tax base excludes all financial transactions, it would be necessary to determine whether a business check was for inventory or for a financial asset.

Income tax records are more difficult to construct from a business checkbook. Inventory and capital accounts must be established. It can be difficult to verify that inventory was destroyed or stolen or to determine appropriate reserves.

Smaller companies will operate out of a single personal and business checkbook. Here the additional problem is separating personal and business expenses, but presumably most of these businesses will not be subject to the cash flow tax.

The smallest companies may operate only in cash. For companies that have inadequate or no records, presumptive taxes can be used. The simplest form of a presumptive tax is a business license. Street vendors, small retail outlets, and cottage industries can be required to purchase annual licenses.

There are a number of administrative and compliance problems with a cash flow tax. Many of these problems are at the individual and not the company level; e.g. treatment of housing and other durables; the treatment of education and training, withholding on periodic income payments may not approximate final tax liability; and possible gaming of the system if individuals can choose between qualified accounts and tax-prepayment. The major compliance issues for a company cash flow tax are the possibilities for gaming the system, the appropriate treatment of employee benefits and business entertainment, and the treatment of loss companies.

A. Gaming the System

Gaming possibilities arise when (1) one party to a transaction is outside the system and (2) the transaction itself can be converted from a transaction that is inside the system to one that is outside the system.

To illustrate this, consider the following example. A subsidiary pays a dividend to a foreign parent. The subsidiary will be subject to the regular cash flow tax on the dividend because dividends are not taxable. The foreign parent in addition will be subject to the special withholding tax on dividends paid to foreigners. If instead of paying a dividend, the subsidiary pays management fees to its foreign parent, no tax will be collected because the purchase of

management services reduces the tax base of the subsidiary. Because the parent is outside the system, it would not pay tax on the management fee except in the home country (where both management fees and dividends are likely to be in the tax base). Thus, converting a dividend into a management fee shrinks the source country's tax base.

There are many similar possibilities for gaming the system, particularly if financial transactions are outside the system.

1. Transfer prices - The foreign-controlled subsidiary could purchase raw materials at an inflated price or sell finished goods at a below market price in lieu of paying a dividend to its foreign parent.
2. Seller financing - A company buying abroad may have a choice between paying \$100 now or \$105 six months from now. The company would choose to pay \$105 and in effect deduct \$5 of interest. In contrast, when a company sells abroad, the company would want any interest payments separately stated. In fact, the company will want to understate the true selling price and inflate the interest payments. This all suggests that seller financing will have to be very carefully policed if financial transactions are outside the system and one of the parties to the transaction is outside the system.

3. Defaults and forgiveness of indebtedness - If loans are included in the tax base, a default or debt forgiveness would have no tax consequences. If loans are not included in the tax base, a default or debt forgiveness should be an imputed receipt for the borrower and an imputed deduction for the lender. If this rule is not followed and the lender is outside the system, a default or debt forgiveness is an extreme case of a below market rate loan. Abuse possibilities are widespread. For example, an exempt university could make a market rate loan to a professor and then forgive the principal and interest each year.

4. Employer loans - If financial transactions are outside the system, tax exempt institutions could remunerate employees with exempt interest. Alternatively, the exempt institutions could compensate their employees by giving them low interest rate loans instead of taxable wages. In short, employer/employee loans can convert wage income into interest income. This may not be a major problem if both the employer and employee are in the system and subject to about the same marginal tax rate, but it is a problem if the employer is outside the system or if the employee's marginal tax rate is significantly different from the employer's marginal rate.

5. Long-term leases - A net long-term lease may be difficult to distinguish from a purchase with seller-provided financing. If the lessor is an exempt taxpayer or a foreigner, leasing would permit the buyer to deduct "interest" payments.
6. Different accounting years - If companies have different accounting years, it may be possible to game the system through intercompany transactions. For instance, at the end of company A's accounting year it purchases excess materials from B, reducing its tax base. Next month, when company B's accounting year ends, it repurchases the material from company A plus additional excess material to artificially reduce its tax base. These transactions could be financed by debt that is outside the system. The problem of differing fiscal years might be solved by requiring all companies to have the same tax year.

If financial transactions are inside the system; that is, the tax base is $R + F$, there would be fewer possibilities for gaming the system because converting interest into wages or lease payments, etc. will not be a problem. One would still need to be concerned with converting non-deductible dividends into something deductible such as interest whenever the dividend recipient is outside the system.

These examples of gaming also plague the income tax. The rules to limit gaming possibilities are a major source of administrative and compliance complexity. As the Appendix demonstrates, depreciation accounting need not be a major source of complexity under an income tax.

B. Fringe Benefits and Business Entertainment

In general, people consume, not corporations. Corporations, however, do provide company cars for personal use and housing, medical and other insurance to their employees, officers, and shareholders. A portion of business entertainment has a personal element. Such company provided consumption should be taxed. (Under U.S. law such consumption generally is imputed to employees or it is tested under Section 89 for discrimination.) It may be difficult to impute the value of this consumption to the employees, officers, and shareholders. An alternative would be to deny a company deduction for these expenses. If the company tax rate is higher than the marginal rate of most individuals, this form of consumption may be overtaxed. This would not be all bad. Another alternative would be to impose an excise tax at the company level. This would reach the employee benefits provided by companies with losses and by any tax-exempt employer including governmental units.

C. Loss and Start-up Companies

Aaron/Galper suggest that tax losses should not be refundable but instead should be carried forward with interest to maintain their real value. Though the chosen rate for imputed interest may on average be the right rate, it is unlikely to be the right rate for every taxpayer.

The problem of loss companies will be magnified if financial transactions are outside the system. For example, consider a start-up company which issues stock for \$40 and borrows \$60 to purchase a \$100 machine. If financial transactions are left out of the system, the tax base is -100; if financial transactions are included, the tax base is -40.

IV. Transition Problems

The Treasury Blueprints outlined two separate problems requiring transition rules: carryover and price changes. If the corporate income tax is replaced with a cash flow tax, carryover problems arise because income deferred under the income tax may never be taxed under the cash flow tax and income previously taxed under the income tax may be taxed a second time under the cash flow tax. Changes in asset prices occur because changes in the tax law affects expected after-tax cash flows. These price changes will cause windfall gains and losses.

After considering the equity concerns of both the carryover problem and price changes and reviewing the alternatives of grandfathering and phasing in the new cash flow tax, Treasury Blueprints suggested that, for a period of ten years, taxpayers compute their tax under the old and the new laws and pay the higher of the two computed taxes. This transition approach has the advantage of avoiding significant revenue loss during the transition, but it seems likely to be a non-starter. The simplicity gains from a cash flow tax would be largely dissipated if the old law is retained for ten years. Also, companies would fear that the old law would be retained forever. There are too many examples in the history of "what goes around comes around" for taxpayers to have confidence in a ten-year phase-in.

The transition problems of moving to cash flow tax for individuals revolve around how old wealth should be treated. Should old wealth be taxed when consumed; should it be taxed only to the extent income had been deferred under the income tax; or should it be exempted from the new tax altogether? These are tough questions but outside the scope of this paper.

The transition issues for a corporate cash flow tax are somewhat different because companies will be going from an income tax with a positive effective tax rate to a cash flow tax with a zero effective tax rate. One possible approach

would be to go cold turkey to the new tax rules; that is, companies would compute their cash flow tax base for the first year of the new tax assuming they had always been under this tax.

The cold turkey approach has its problems. Companies that made real investments just before the effective date would not be able to write them off at all, while companies that made real investments just after the effective date would be able to expense them. This might suggest that old investments should be permitted to be written off under the new tax. If all old investments (including inventories) are expensed the first year plus all new investments, the new tax will raise very little revenue. One possibility, weighing revenue considerations and equity concerns, would be to depreciate old investments under prior law rules and to permit existing inventories to be amortized over a period of years. This would reduce, but not eliminate, the discrimination between companies that invested just before or after the effective date. Depreciating old investments, however, would shrink the tax base, aggravating the revenue loss of shifting from a corporate tax on dividends plus retained earnings to a cash flow tax on dividends alone.

Cold turkey probably would be an acceptable approach for transition if all companies made regular investments each year. The problem is that some companies may have made very large irregular investments just before the switch to the cash flow tax. This may suggest that companies might be permitted to write-off old investments to the extent that the level of annual investments before the change in the tax law was more than, say, 120 percent of the level of investment after the change in the law.

The treatment of old debt and equity under the new corporate cash flow tax raise issues similar to those relating to the treatment of old real investment. These transition issues depend on whether financial flows are included in the tax base. If financial flows are not included, companies that are highly leveraged would be disadvantaged because interest payments would no longer be deductible. If one wanted to avoid these windfall losses, interest on old debt could remain deductible or partly deductible. This would involve complex, and probably unworkable, ordering or tracing rules. Would companies be allowed to rollover their lines of credit and continue to deduct the interest? Would extensions of existing loans be treated as new loans?

If instead financial flows are included in the tax base, the highly leveraged company would be advantaged. After the effective date of the new law the company could issue shares and retire debt. The retirement of debt would reduce the company's tax base.

Thus, depending on whether or not financial flows are included in the tax base, companies will want to increase or decrease leverage. There might be a need for rules providing special treatment for debt issued just before the effective date to retire stock (if financial flows are included) or for stock issued just before the effective date to retire debt (if financial flows are not included).

V. International Considerations

The international implications of a developing country introducing a cash flow tax are troublesome and have no easy solutions. As long as industrial countries continue to rely on income taxes, it would be better for developing countries also to impose them.

The tax system of a developing country is like a small ship sailing in a large ocean where the tax systems of industrial countries are all large ships. The small ship's sailing will be smooth so long as it sails directly behind a large ship.

The sailing will be quite rough if the small ship sails too far to the bow or stern of the large ship and finds itself in the large ship's wake.

The international problems of a developing country imposing a cash flow tax primarily relate to (1) the treatment of inbound investment; that is, the treatment of investment by foreign-owned companies in the developing country, and (2) the treatment of outbound investment; that is, the treatment of foreign investment by companies resident in the developing country. Inasmuch as developing countries make little direct foreign investment, this issue is not critical for them, but it is obviously critical for industrial countries considering imposing a corporate cash flow tax. There is considerable outbound portfolio investment from developing countries, but the problems raised by portfolio investment relate more to a personal cash flow tax. The other major international issue relates to the treatment of exports and imports.

Before discussing these international issues, a brief summary of the international tax rules is provided. This summary captures the major rules but ignores technical details that are often critical.

Most industrial countries tax the worldwide income of their resident corporations (corporations incorporated in their country). They also tax dividends received by domestic shareholders from foreign corporations (corporations resident in a foreign country). To reduce or eliminate double taxation of the foreign source income, the home country usually allows a tax credit to offset the home country's tax on the foreign source income, including any withholding taxes paid on remittances. The credit is limited to the home country's tax on the foreign income. Thus, industrial countries that tax worldwide income and allow a foreign tax credit, in effect, hold an umbrella over the foreign country's tax. Foreign governments can tax the income of a foreign controlled corporation up to the effective tax rate of the home country without imposing any additional tax burden on the corporation.

Some industrial countries--the Netherlands; France, Belgium, Singapore and Hong Kong--have adopted the territorial system. These countries, in theory, only tax the domestic income of their corporations. In practice, countries with a territorial system usually tax foreign portfolio income and some tax haven income of their corporations.

The income tax rules of developing and industrial countries tend to be similar. The major exception is that developing countries, being primarily capital importing nations, usually have more expansive source rules and more restrictive rules on the deductibility of royalties paid abroad.

To reduce double taxation and to harmonize the tax systems of different countries, most countries have entered into bilateral tax treaties to reduce withholding tax rates, provide that foreign controlled companies are treated the same as domestic companies (non-discrimination), harmonize source rules, insure the creditability of foreign taxes, share tax information, and provide for resolution of certain tax disputes through competent authorities. In the case of tax treaties between industrial countries and developing countries, industrial countries (other than the United States) have agreed to tax sparing provisions under which the industrial country will credit taxes that would have been paid to the government of the developing country but for tax incentives provided by the source country. Tax sparing is said to preserve the source country's tax incentives. Otherwise, when dividends are remitted, the home country would pick up the tax revenue that the source country had spared through the tax incentives.

The rules relating to the tax treatment of companies operating across national boundaries have evolved over many years. To some extent they represent a compromise between the interests of home and source countries. They may also be said to represent a compromise between capital import and capital export neutrality.

Capital import neutrality exists if the tax treatment of foreign controlled companies in country X is the same as the treatment of country X's domestic companies. As industrial countries with foreign tax systems generally do not tax the income of their foreign controlled companies until dividends are remitted home, capital import neutrality prevails so long as the foreign controlled companies reinvest their earnings in the source country.

Capital export neutrality exists if the tax treatment of a domestic company is the same whether the company invests at home or abroad. Thus, the decision to invest at home or abroad would not hinge on taxes. The foreign tax credit mechanism generally insures that companies do not go abroad for tax reasons. To the extent that the effective tax rate is lower abroad, the home country will impose an additional tax when dividends are remitted, bringing the effective tax rate up to the rate in the home country. If the effective tax rate abroad is higher than at home, a tax credit is allowed only for taxes up to the effective rate in the home country. The tax systems of industrial countries generally allow some averaging of high-taxed and low-taxed foreign income though these rules are becoming much more restrictive. Capital export neutrality is violated to the extent that the home country only taxes the income of controlled foreign corporations when dividends are remitted or to the extent the home country allows tax sparing.

A. Inbound Investment

If a developing country adopts a pure corporate cash flow tax there will be a significant transfer of tax revenue from the developing country to any home country which continues to rely on income taxes. This problem was recognized by Aaron/Galper and by the Meade Commission. Their solution was to impose a special withholding tax on dividends paid to foreigners. The purpose of this withholding tax would be to soak up the allowable foreign tax credit in the home country so no residual tax would have to be paid in the home country.

Would the regular cash flow tax or the withholding tax be creditable against the home country's income tax? Would the withholding tax violate the nondiscrimination provisions of existing tax treaties?

Both the regular cash flow tax and the extra withholding tax probably would not be creditable against the U.S. income tax. In general, the U.S. allows a credit for "income, war profits, and excess profits taxes" paid or accrued during the taxable year to a foreign government or a U.S. possession.^{13/}

Neither the regular cash flow tax (which does not purport to measure income) nor the dividends tax would qualify as an "income tax" because the predominant character of those taxes is not that of an income tax in the U.S. sense.^{14/} The dividends tax might still qualify for the credit if it were a

tax imposed in lieu of an income tax.^{15/} The dividends tax associated with a cash flow tax, however, would not qualify as an "in lieu" tax because it would not be imposed in substitution for an income tax otherwise generally imposed.^{16/} This "substitution test" is a requirement of the regulations. Some accountants and lawyers maintain that the regulations go beyond the statutory authority and case law and that a credit might be sustained in litigation. This probably is not much comfort for a developing country considering a cash flow tax.

The United States has the most restrictive rules relative to what is a creditable tax. In other countries, the regular cash flow tax and the dividends tax may be creditable under current law or the countries might be willing to provide by treaty that these taxes are creditable. It seems to me that countries that allow tax sparing should not have much problem with allowing a credit for a consumption tax and a dividends tax.

A second problem with the dividends tax is that it may violate the nondiscrimination provisions of most tax treaties. A special tax on foreign shareholders but not resident shareholders clearly is discriminatory and is meant to be so. This tax, however, probably does not violate the typical nondiscrimination provisions of tax treaties, if as a legal matter the tax is imposed on the foreign shareholder. (That

is, the developing country would tax foreign shareholders on the dividends they received. To accomplish this, the developing country could impose a withholding tax on the foreign shareholders and then relieve them of any obligation to file a return.) The nondiscrimination provision generally provides that, say, the United States will not treat its own nationals more favorably than the nationals of the other treaty country resident in the United States. Also, the United States will not treat its own companies more favorably than companies operating in the United States and controlled by residents of the treaty partner. The nondiscrimination provision, however, does not extend to the shareholders of the foreign controlled corporation so they can be discriminated against.

For the multinational companies a dividends tax may eliminate most of the simplicity aspects of a cash flow tax. The reason for this is that it would still be necessary to determine whether a distribution to a foreign shareholder was a dividend or a return of capital. Dividends are only paid out of earnings. To determine whether a company has earnings it would be necessary to measure income. If you are going to measure income, you might as well have an income tax. One solution to this problem might be to provide that any distribution other than a liquidating distribution to a foreign shareholder is a dividend subject to the dividend tax.

B. Outbound Investment

Developing countries make little outbound direct investment. Even so, developing countries may want to pay some attention to the treatment of outbound investment when considering a corporate cash flow tax. If a developing country has a cash flow tax (zero effective tax rate) and industrial countries have income taxes (positive effective tax rates), capital export neutrality will be violated. A possible answer here is "hard cheese." If the industrial countries want to continue to tax income, that is their problem.

C. Exports and Imports

Cash flow taxes are taxes on consumption. But unlike the VAT, the proposed cash flow taxes on corporations (Aaron/Galper and Meade Commission) do not permit border tax adjustments for exports and imports. Thus, these proposals are origin principle consumption taxes.

One may argue that border adjustments are unnecessary because exchange rates will adjust. That is, instead of imposing, say, a 30 percent tax on imports and rebating a 30 percent tax on exports, the currency can devalue by 30 percent. This is probably strictly true only in a world in which each country's

current account is always in balance. As most developing countries have chronic current account deficits, letting the exchange rates adjust probably is not equivalent to a border tax adjustment.

It would not be difficult to provide a border tax adjustment for a cash flow tax. Payments for imports would not be deductible and receipts from sales of exports would be excluded from the tax base. One difficulty would be that exporters would be "loss" companies. Refunds would have to be allowed.

APPENDIX

Fixing Up the Income Tax

An income tax involves difficult issues of income measurement, but these difficulties can be overstated. One practical way of minimizing these difficulties is for the tax base to be defined in terms of financial income with certain specified adjustments such as for depreciation and extraordinary items. In the case of multinational companies, the tax authorities will have to review transfer prices and determine whether the debt equity ratio is excessive. Tax officials would need to be permitted to go behind audited statements to insure that income and expenses were recorded properly and to determine whether an expense was capital or ordinary in nature.

Some will argue that the goals of financial and tax accounting differ. Financial accounting is conservative. The goal is not to overstate income. Also, financial accounting focuses primarily on the income from continuing operations. The goal of tax accounting may be to insure that income is not understated.

A major argument for relying on the financial records of companies is the limited supply of accounting skills in developing countries, particularly in the government. As discussed earlier, the private accounting profession can be made a partner of the tax authorities.

If income is going to be taxed, then the timing of income and expenses must be matched. This requires that the costs of plant and equipment be spread over the period that they produce income. Ideally, only economic depreciation should be allowed, but very little data are available for estimating economic depreciation. Empirical work suggests that machinery and equipment depreciate in a declining balance pattern; that is, at a constant percent per year. Not all machinery and equipment depreciates at the same rate, but it is possible to divide machinery and equipment into several broad classes.

A simplified system of tax depreciation might have the following characteristics:^{17/}

1. Machinery and equipment for each industry would be classified into one of several classes.
2. Taxpayers would be required to use a single open-ended group account for all machinery and equipment in each class. Taxpayers each year would add the amount of machinery and equipment placed in service during the year to the adjusted basis of the account. The allowable depreciation for the year would be computed by multiplying the adjusted basis of the account by the depreciation rate

for the class. The adjusted basis of the account would then be reduced by the amount of depreciation allowed. The calculation can be illustrated by the following example:

Adjusted basis at beginning of year	\$ 100
Plus machinery and equipment placed in service during year	<u>30</u>
Adjusted basis before this year's depreciation	130
Times depreciation rate	<u>.20</u>
Allowable depreciation	26
Adjusted basis at end of year (130-26)	104

3. Retirements or sales of assets are easily and appropriately handled by open ended accounts. Any proceeds from the retirement or sale of an asset is subtracted from the adjusted basis of the account. Thus, the example above is modified as follows:

Adjusted basis at beginning of year	\$ 100
Less proceeds from retirements or sales	-10
Plus machinery and equipment placed in service during year	<u>30</u>
Adjusted basis before this year's depreciation	120
Times depreciation rate	<u>.20</u>
Allowable depreciation	24
Adjusted basis at end of year (120-24)	96

When an asset is sold, the seller subtracts the proceeds from his depreciation account and the buyer adds it to his account. The total amount of depreciation is unaffected by the sale.

4. Each building would be depreciated in a separate item account. Major additions or renovations would also be depreciated in separate accounts. Depreciation would be computed using the straight-line method and a 20-year life. Thus, 5 percent of the original cost would be written off each year. A shorter life might be appropriate for wooden structures. Gain on sale of buildings would be taxed at a preferential rate. (This is appropriate since the gain for the seller represents a step up in basis for the buyer. This step up will only yield a tax savings in the future. The tax on the gain should equal the present value of the tax savings from depreciating the step up of basis. If the gain is taxed in full, the government makes money every time a building turns over.)
5. The depreciation scheme outlined above could be modified to allow for the half-year convention which assumes that investments are placed in service in the middle of the tax year and, therefore, should be entitled for the first year to only a half-year's depreciation. This refinement is probably not necessary.

6. This depreciation system would easily accommodate an inflation adjustment. The adjusted basis of the account at the beginning of the year would be increased by one plus the inflation rate for the previous year. Assuming a 10 percent inflation rate, the example outlined above would be modified as follows:

Adjusted basis at beginning of year	\$ 100
Times inflation adjustment (10% inflation)	<u>1.1</u>
	110
Less proceeds from retirements or sales	-10
Plus machinery and equipment placed in service during year	<u>30</u>
Adjusted basis before this year's depreciation	130
Times depreciation rate	<u>.20</u>
Allowable depreciation	26

7. Assuming the depreciation rates are set realistically, existing machinery and equipment can be folded into the new system at little revenue cost. The adjusted basis of existing machinery and equipment would be transferred to the new open-ended accounts.

The depreciation system outlined above would be far simpler than traditional systems based on item or vintage accounts. Since the depreciation rate would be applied to the adjusted basis of the account, the system would be partially self-connecting. Too much depreciation in one year would reduce the amount of depreciation allowed in subsequent years. Also, complex recapture rules would not be needed

since any proceeds from a retirement or a sale would be subtracted from the adjusted basis of the account. This system would easily accommodate an inflation adjustment. It would not be necessary to go back to the original cost of the equipment to compute the inflation adjustment.

Indexing for inflation may also be required for inventories, capital gains, and debt. Indexing inventories and capital gains is fairly straightforward. In the case of inventories, companies should be required to use FIFO inventory accounts. When goods or material are brought out of inventory, the basis will be increased by one plus the inflation rate since the time the goods or material were put in the inventory. The basis for capital assets would be adjusted in a similar manner when the assets are sold.

The most complex indexing issue is how to treat debt. The theoretically correct answer is to reduce the deduction for interest paid and to reduce the amount of interest income included in income by the inflation rate times the amount of indebtedness. Given that the amount of indebtedness may change with every payment on the loan, numerous computations may be required.

One may conclude that the complexities of indexing debt are so great that no adjustment for inflation would be better. Debt is different than capital gains, depreciation and inventories, because most indebtedness is between private parties and the interest rate can be adjusted by the parties to reflect expected inflation and the tax treatment of nominal interest paid and received. This may be acceptable, but I suspect that leveraged companies deducting nominal interest and indexed depreciation will often zero out. This could create a serious perception problem.

FOOTNOTES

1/See E. Cary Brown, "Business-Income Taxation and Investment Incentives," in Richard A. Musgrave and Carl A. Shoup, eds. Readings in the Economics of Taxations (Homewood, Ill., 1959).

2/S. 1102, introduced in 1985 by Senator Roth

3/Canada Department of Finance, Tax Reform 1987: Sales Tax Reform (June 18, 1987).

4/Robert E. Hall and Alvin Rabushka, Low Tax. Simple Tax. Flat Tax (New York: McGraw Hill, 1983).

5/David Bradford, "On the Incidence of Consumption Taxes," in Charls E. Walker and Mark A. Bloomfield, eds., The Consumption Tax: A Better Alternative, (Cambridge, Mass.: 1987)

6/Nicholas Kaldor, An Expenditure Tax (London: Unwin University Books, 1955).

7/William D. Andrews, "A Consumption-Type on Cash Flow Personal Income Tax," Harvard Law Review, vol. 87 (April 1974), pp. 1113-88.

8/U.S. Treasury Department, Blueprints for Basic Tax Reform (January 17, 1977).

9/Institute for Fiscal Studies, The Structure and Reform of Direct Taxation: The Report of a Committee Chaired by Professor J. E. Meade (London: George Allen and Unwin, 1978).

10/Henry J. Aaron and Harvey Galper, Assessing Tax Reform (Washington, D.C.: The Brookings Institution, 1985).

11/Aaron and Galper, p. 79.

12/The discussion here assumes all shareholders and corporations are domestic. The treatment of foreign shareholders and corporations is considered later.

13/Section 901, Internal Revenue Code of 1986.

14/Section 1.901-2(a) of Regulations.

15/Section 903, Internal Revenue Code of 1986.

16/Section 1.903-1(a) of Regulations.

17/The ideas presented here were originally developed by the author when he served as a consultant on the Indonesian tax reform project.

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